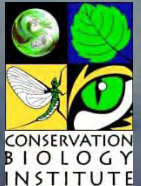


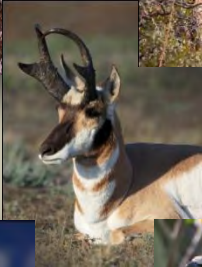
Mapping Landscape Intactness for BLM Rapid Ecoregional Assessments

James R. Strittholt, Ph.D.
Tim Sheehan
Brendan Ward

Conservation Biology Institute
Corvallis, Oregon
www.consbio.org



Conservation Elements



Change Agents

Development



Invasives



CLIMATE CHANGE

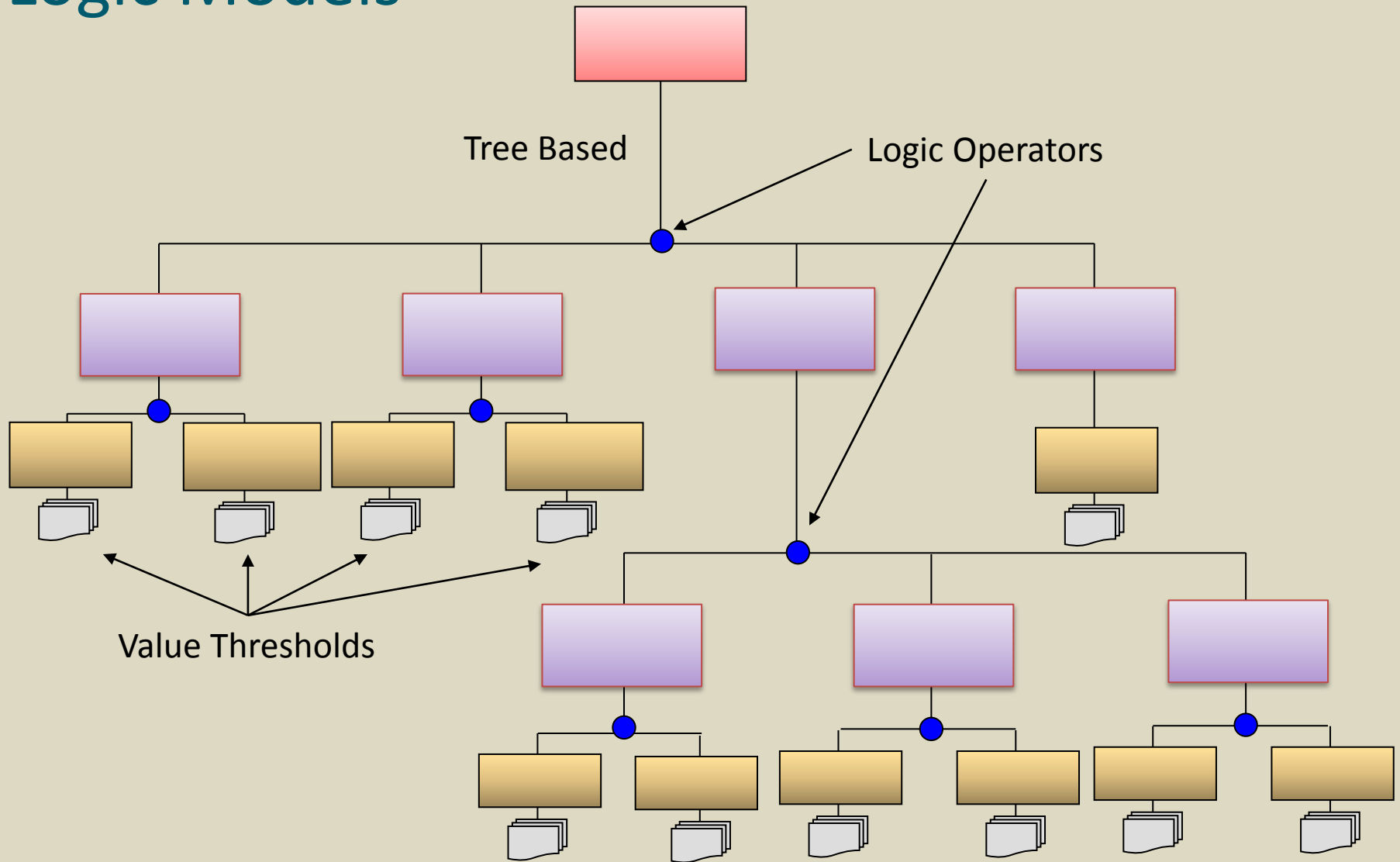
Fire



Energy



Logic Models



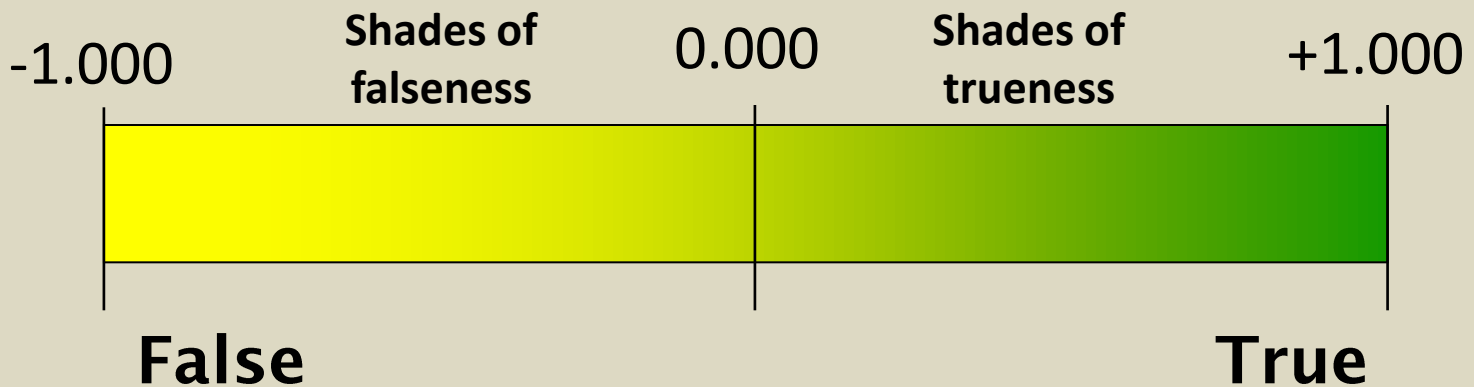
Multiple factors combined to address a question

Based on Fuzzy Logic

Provides a way of normalizing different types of data into a common range of values (“fuzzy values”).

e.g. High Intactness might take into account:

- Oil wells (point density)
- Roads (linear density)
- Invasive species extent (percent area)



Example: Low Oil Well Density

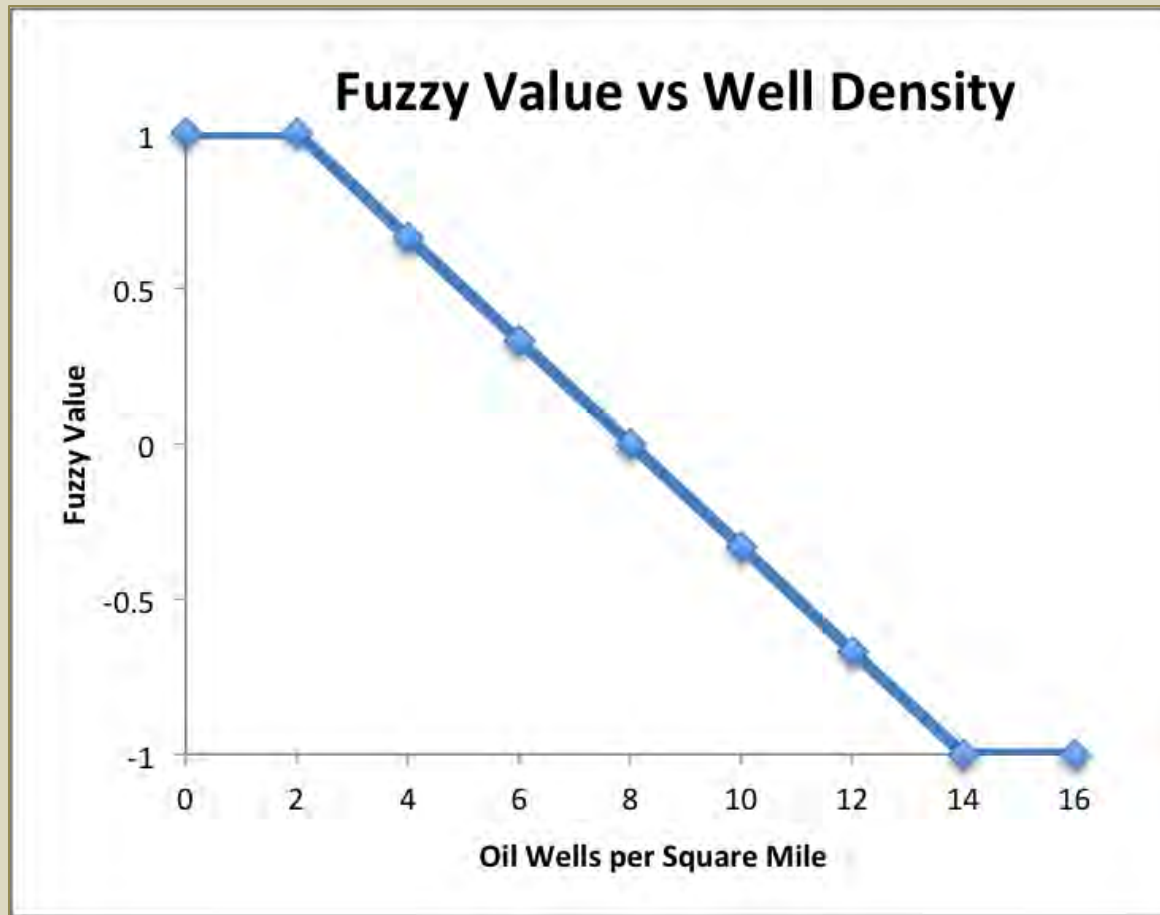
Proposition: Mapped polygon has low oil well density

TRUE threshold: 2 oil wells per mi^2

FALSE threshold: 14 oil wells per mi^2

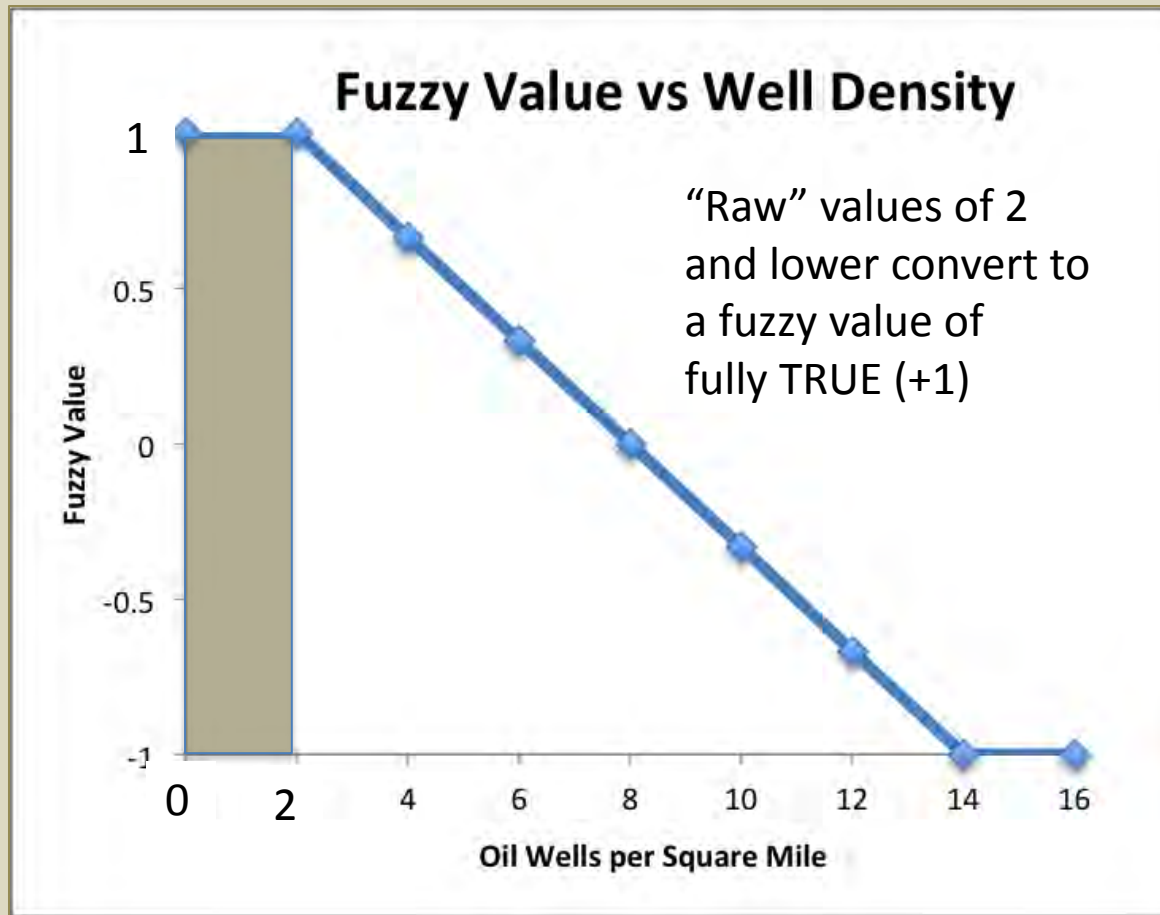
Low Oil Well Density

Real value to fuzzy value conversion



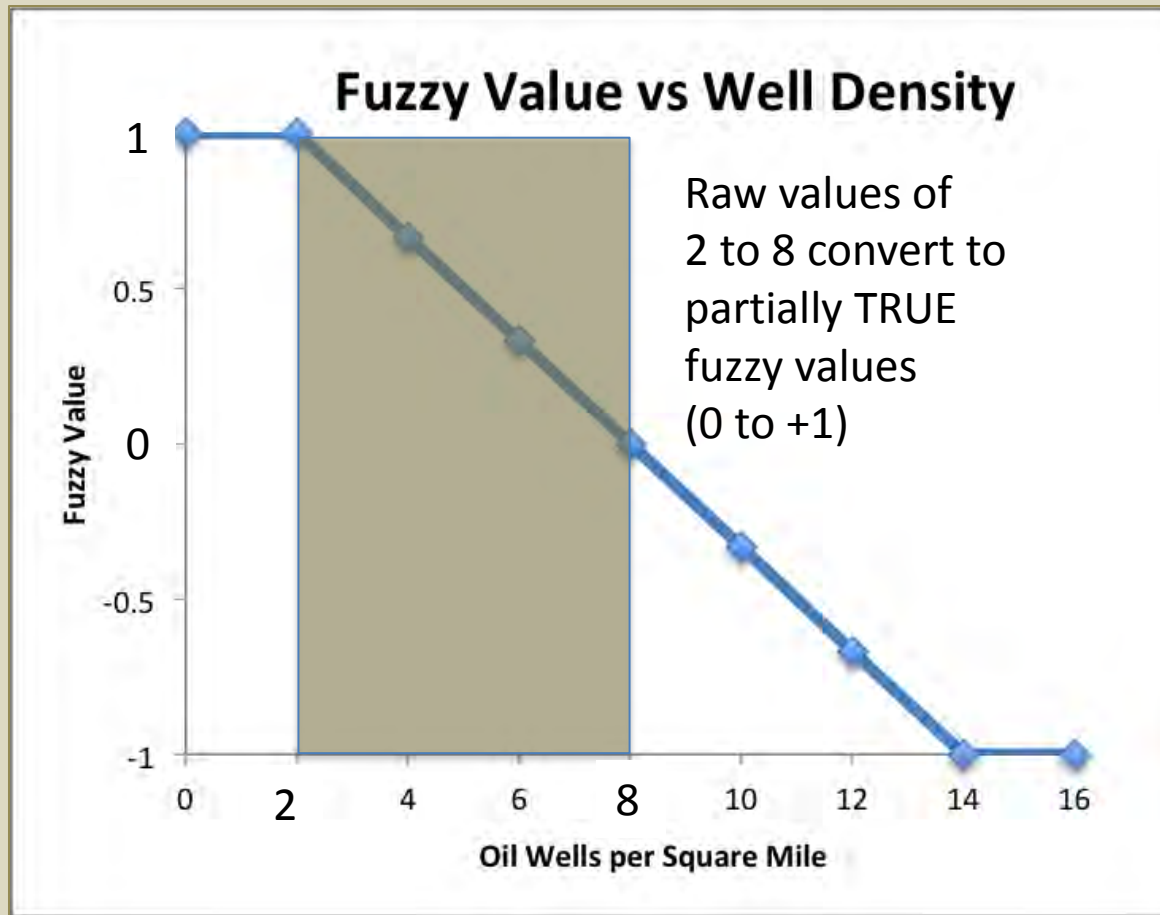
Low Oil Well Density

Real value to fuzzy value conversion



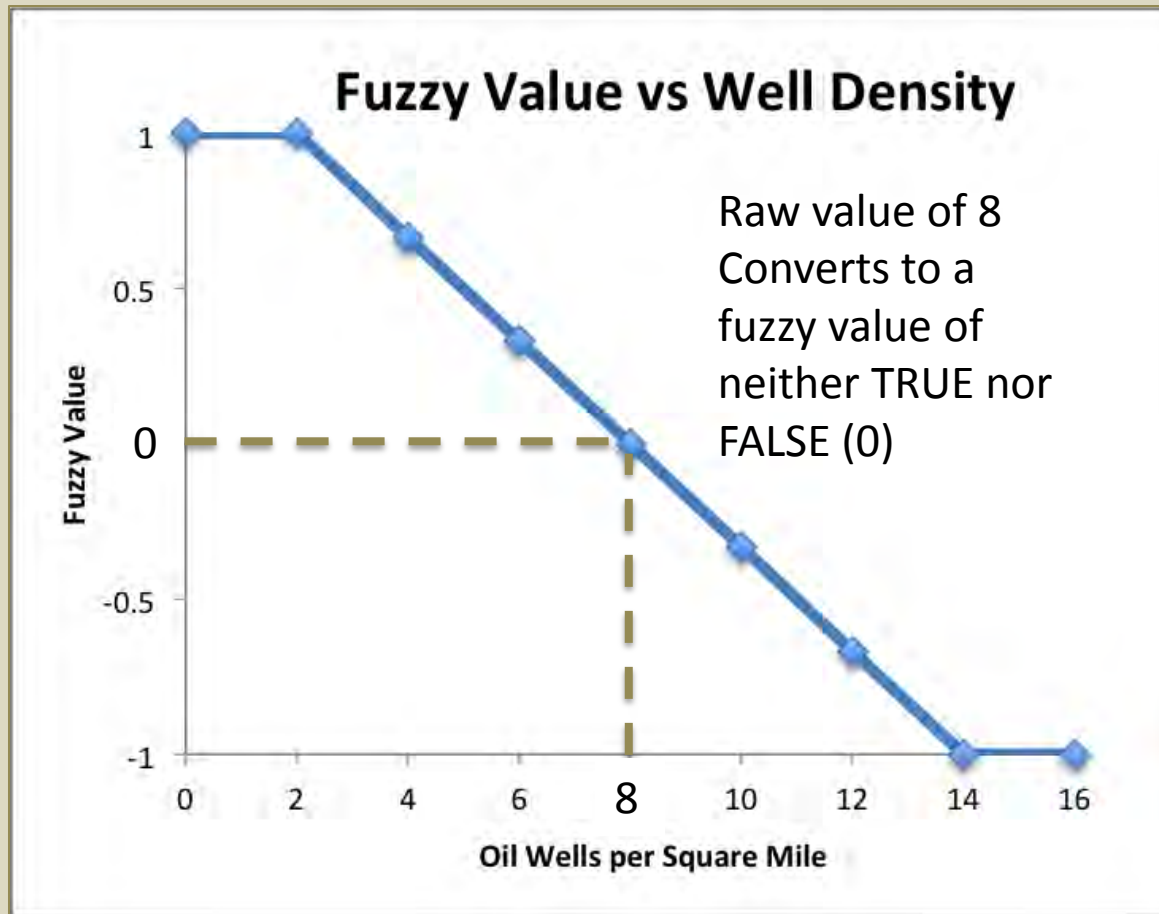
Low Oil Well Density

Real value to fuzzy value conversion



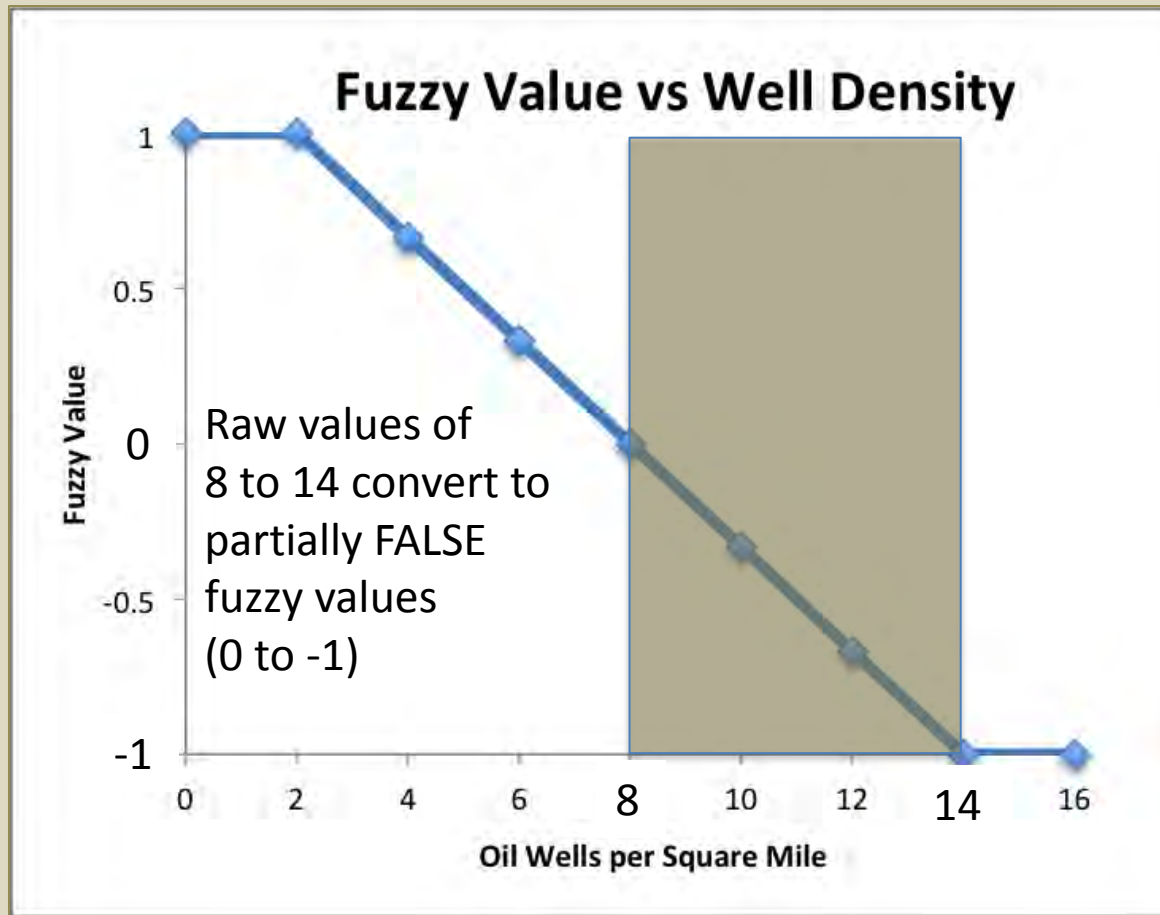
Low Oil Well Density

Real value to fuzzy value conversion



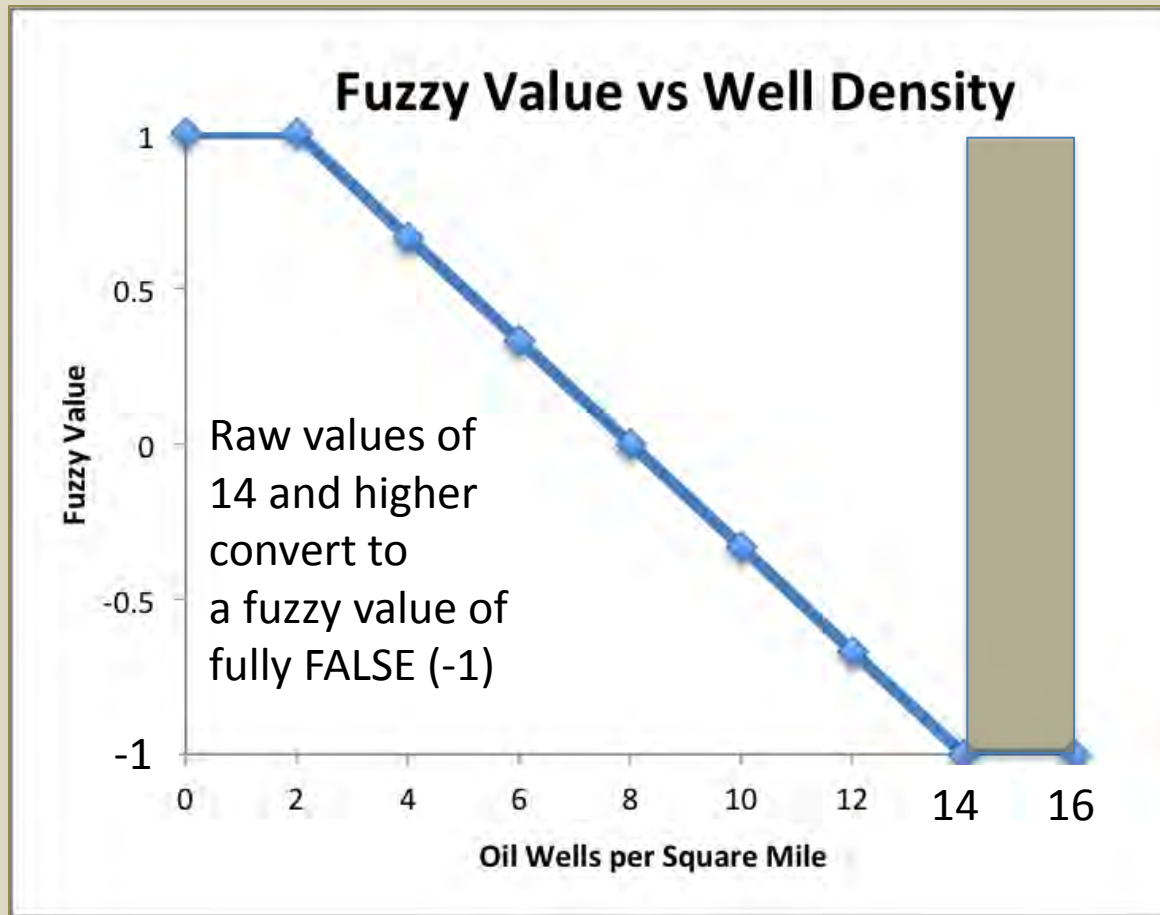
Low Oil Well Density

Real value to fuzzy value conversion

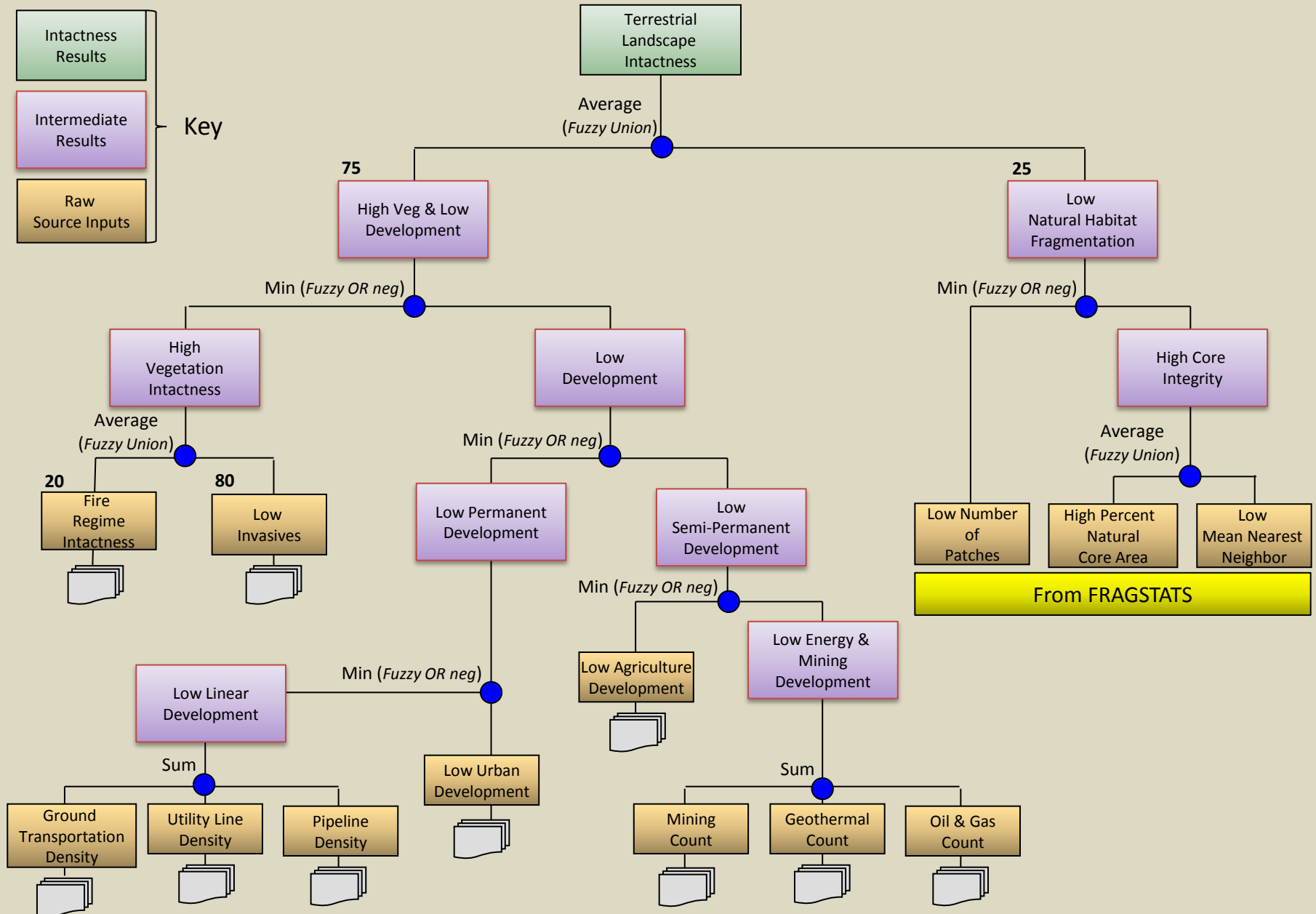


Low Oil Well Density

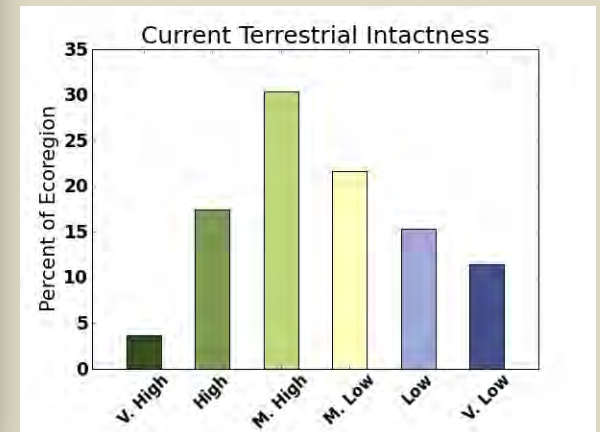
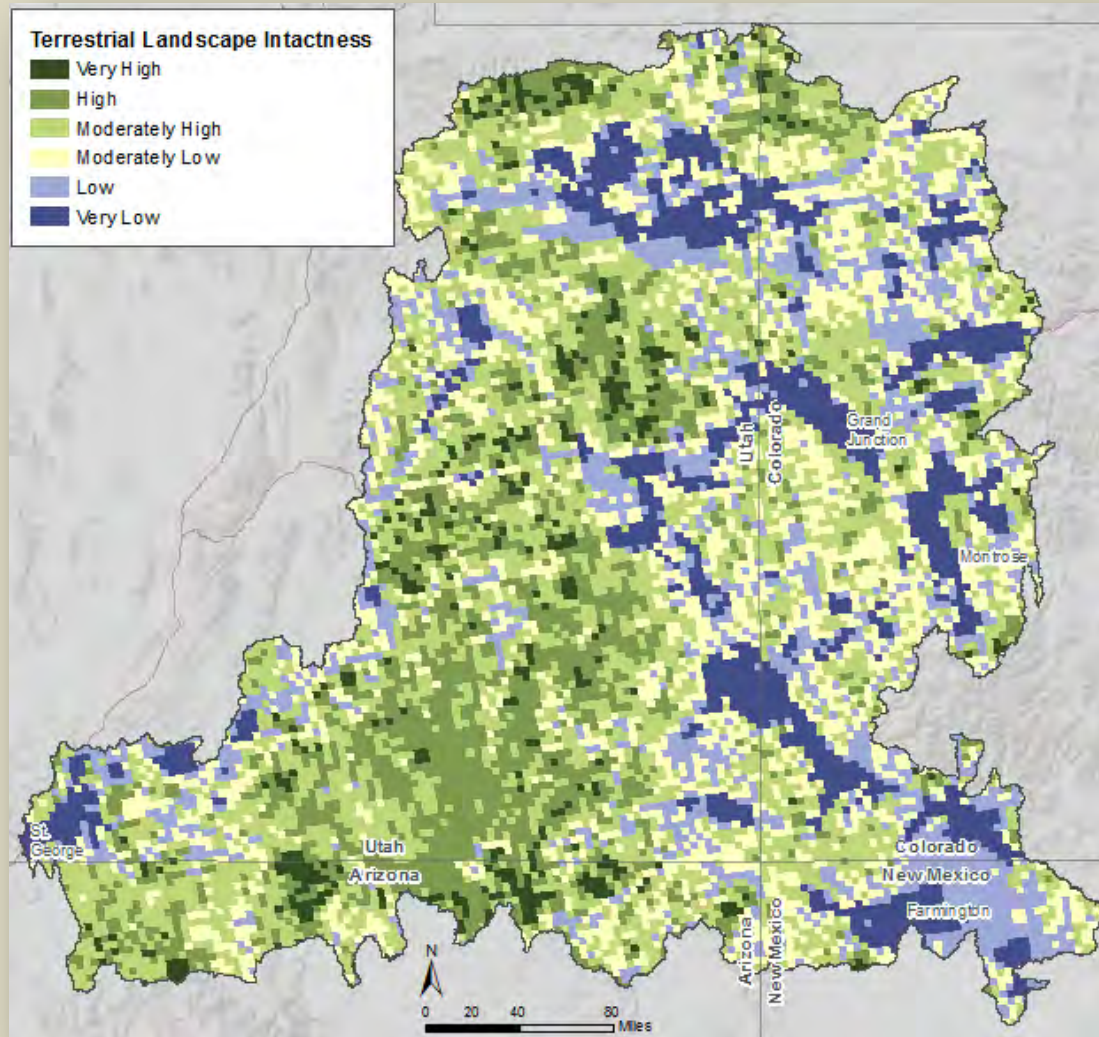
Real value to fuzzy value conversion



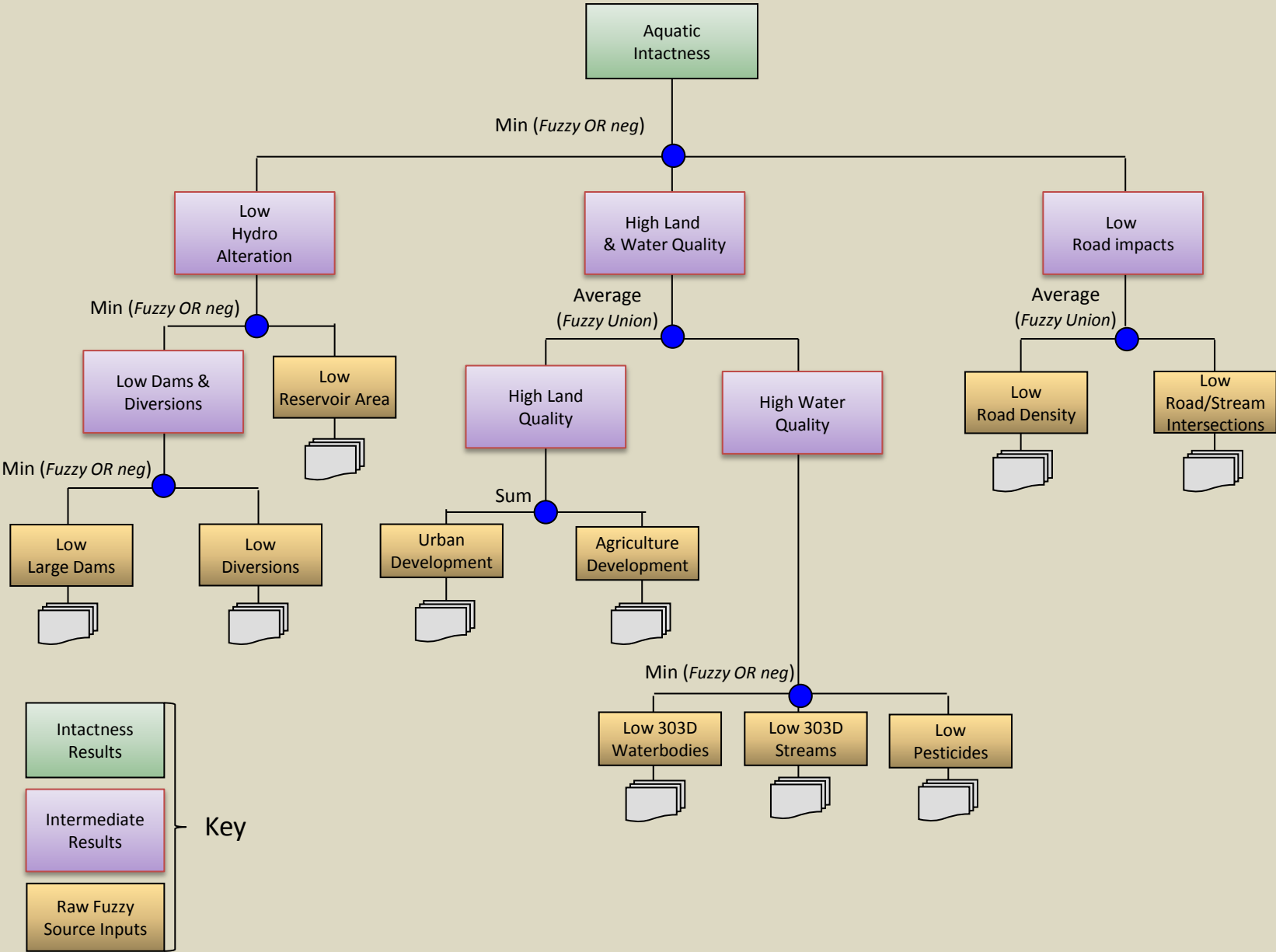
Current Terrestrial Landscape Intactness



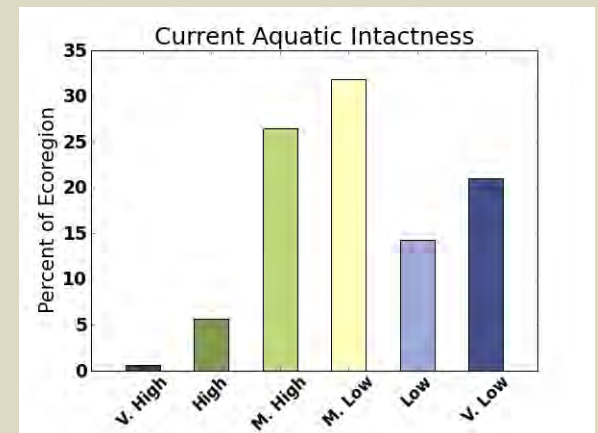
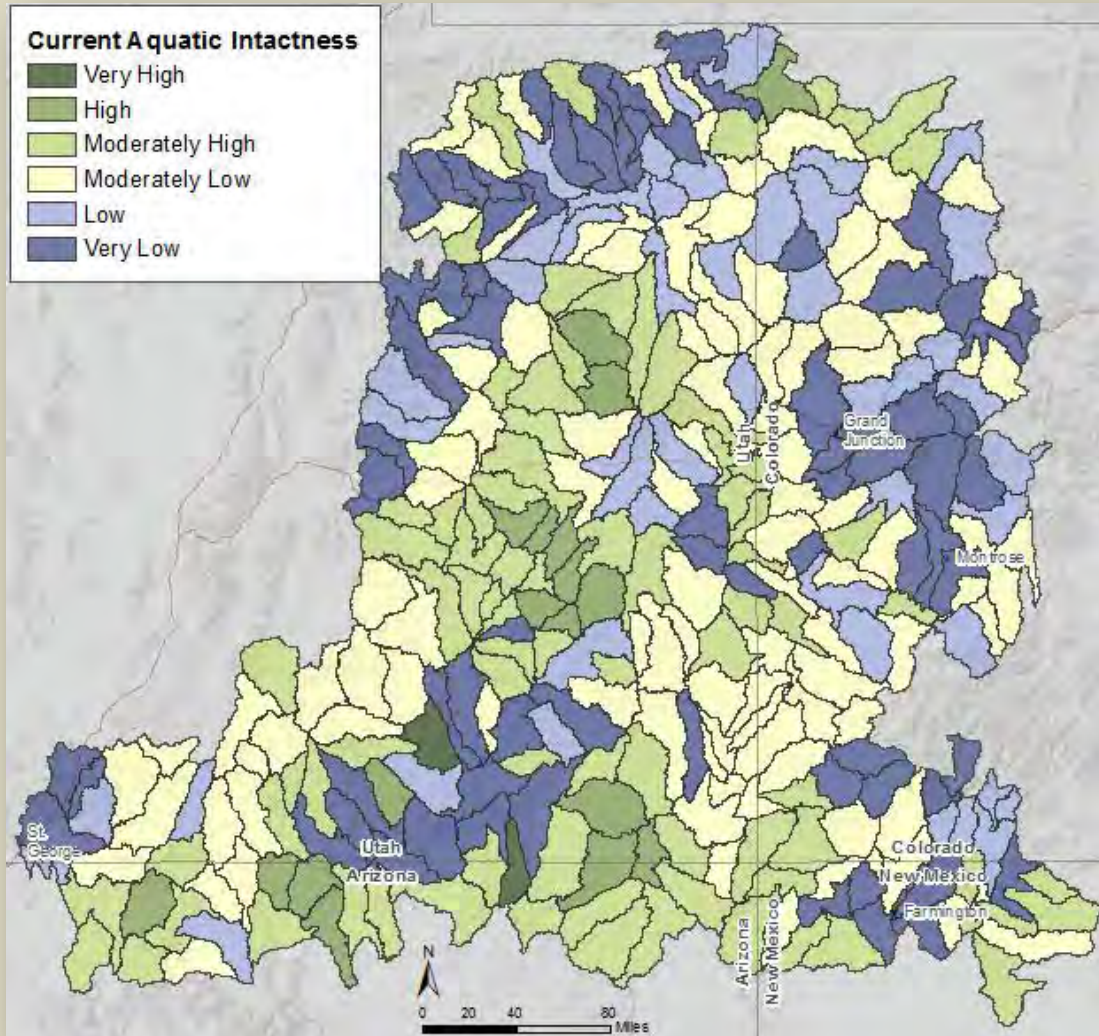
Current Terrestrial Landscape Intactness



Current Aquatic Intactness

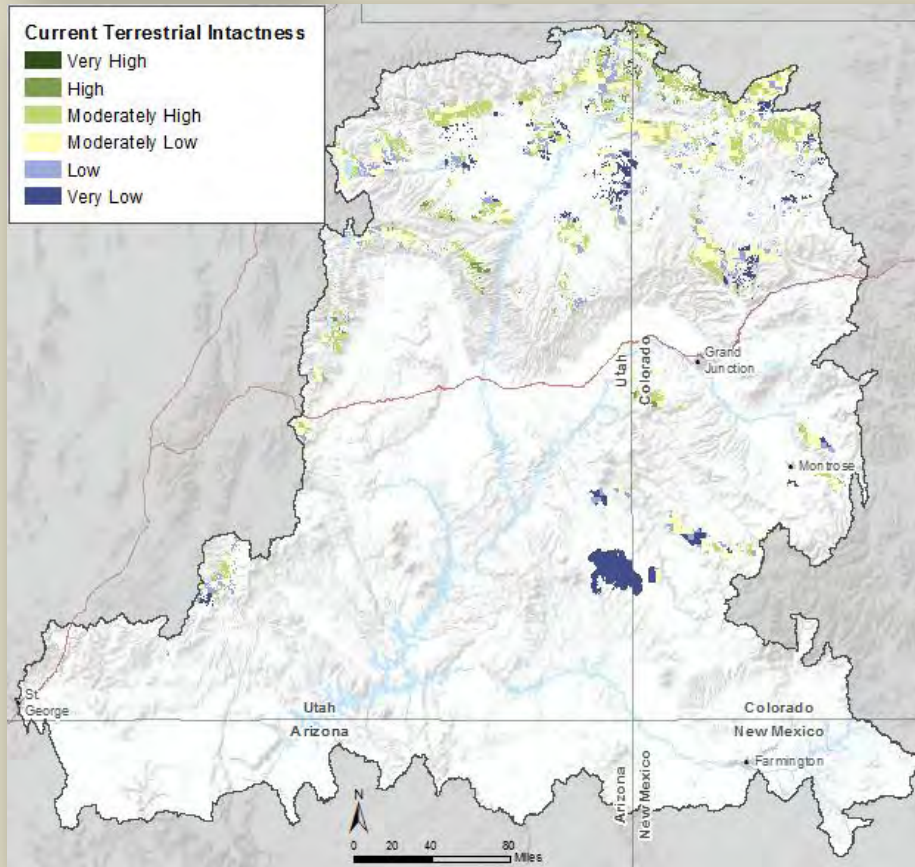


Current Aquatic Intactness

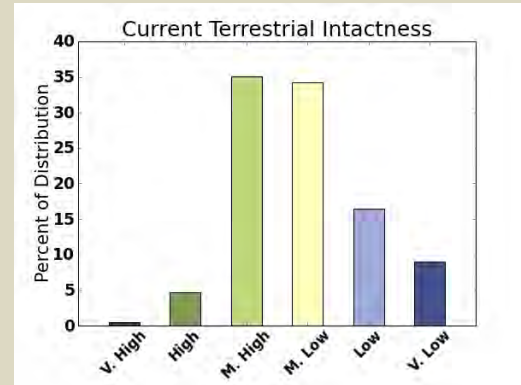




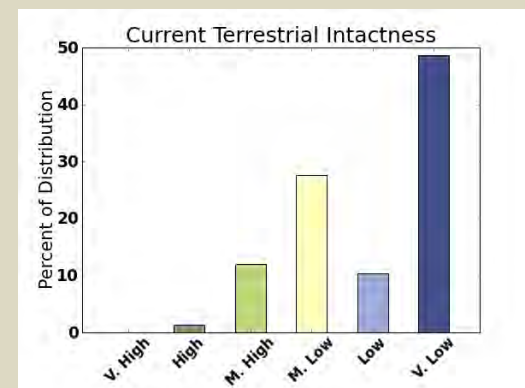
Greater and Gunnison Sage Grouse



Greater Sage Grouse

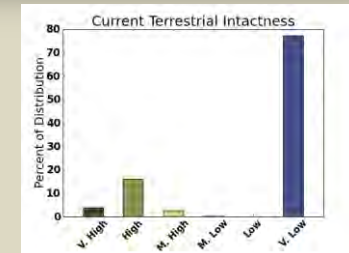
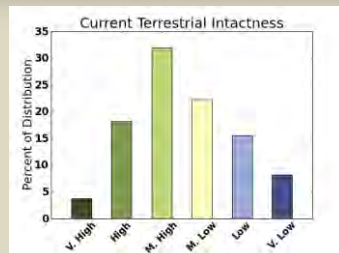
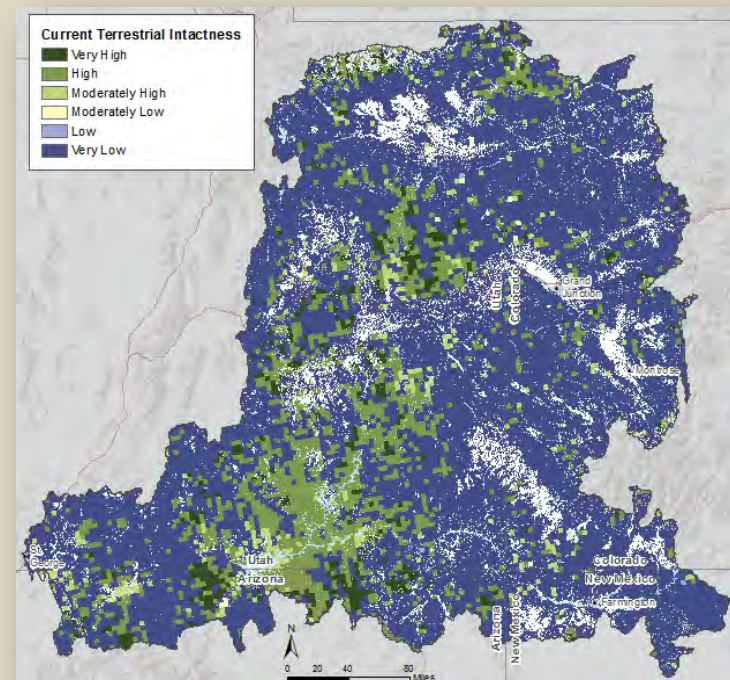
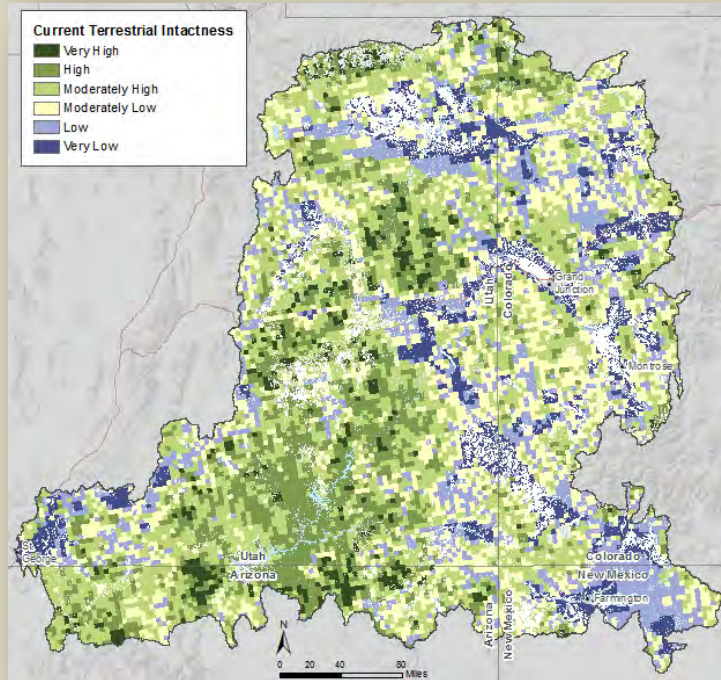


Gunnison Sage Grouse



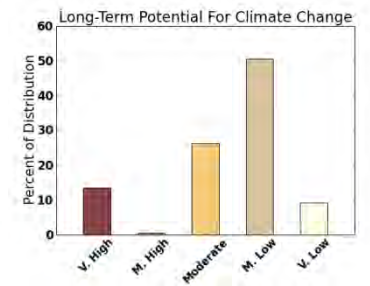
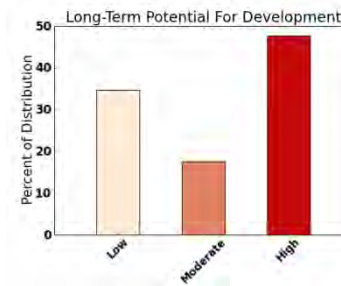
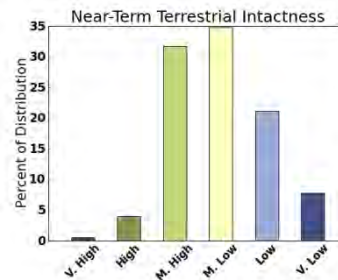
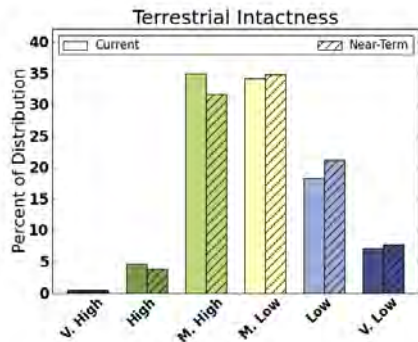
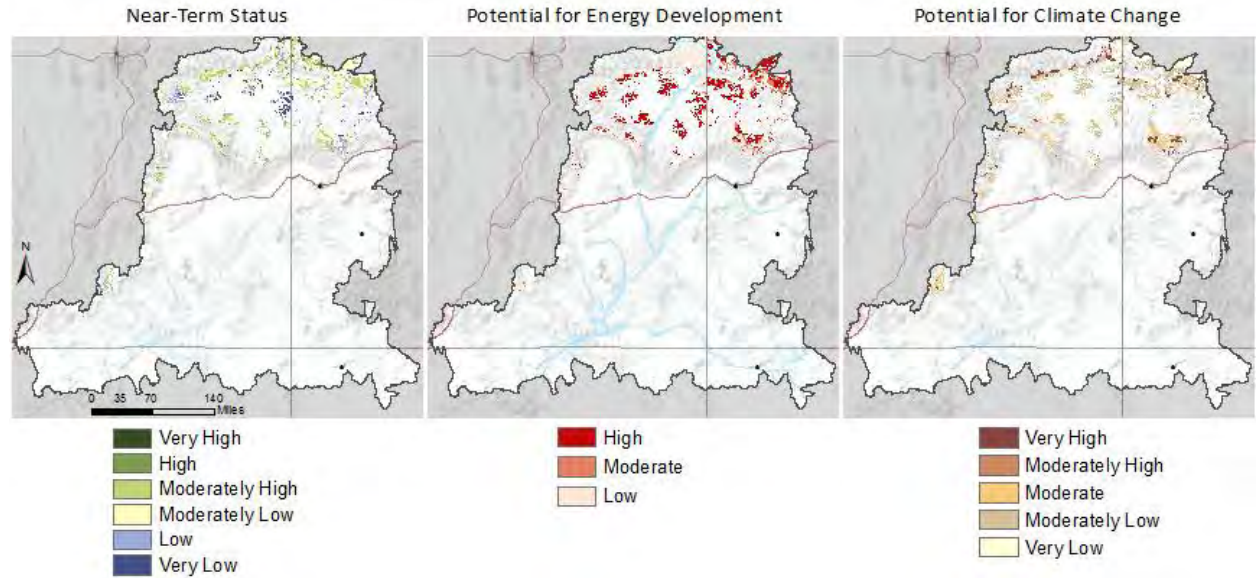


Mountain Lion



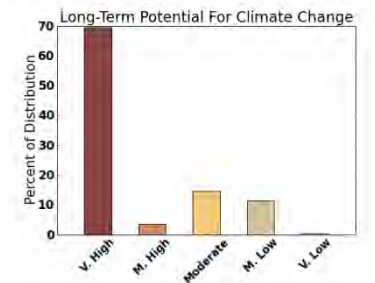
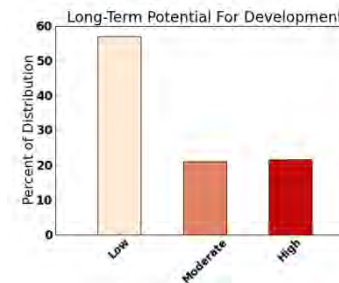
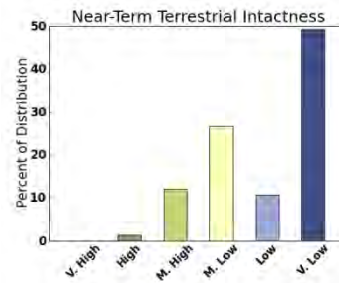
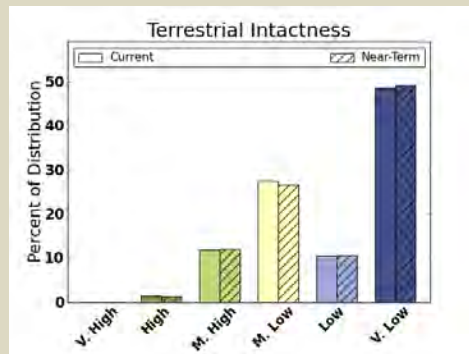
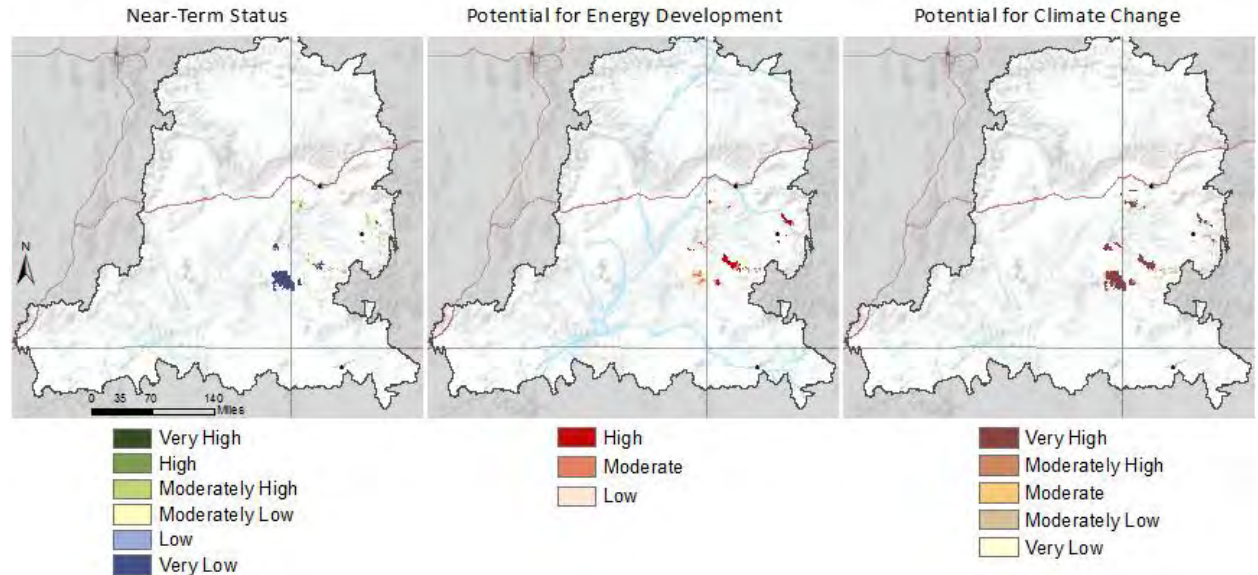


Greater Sage Grouse





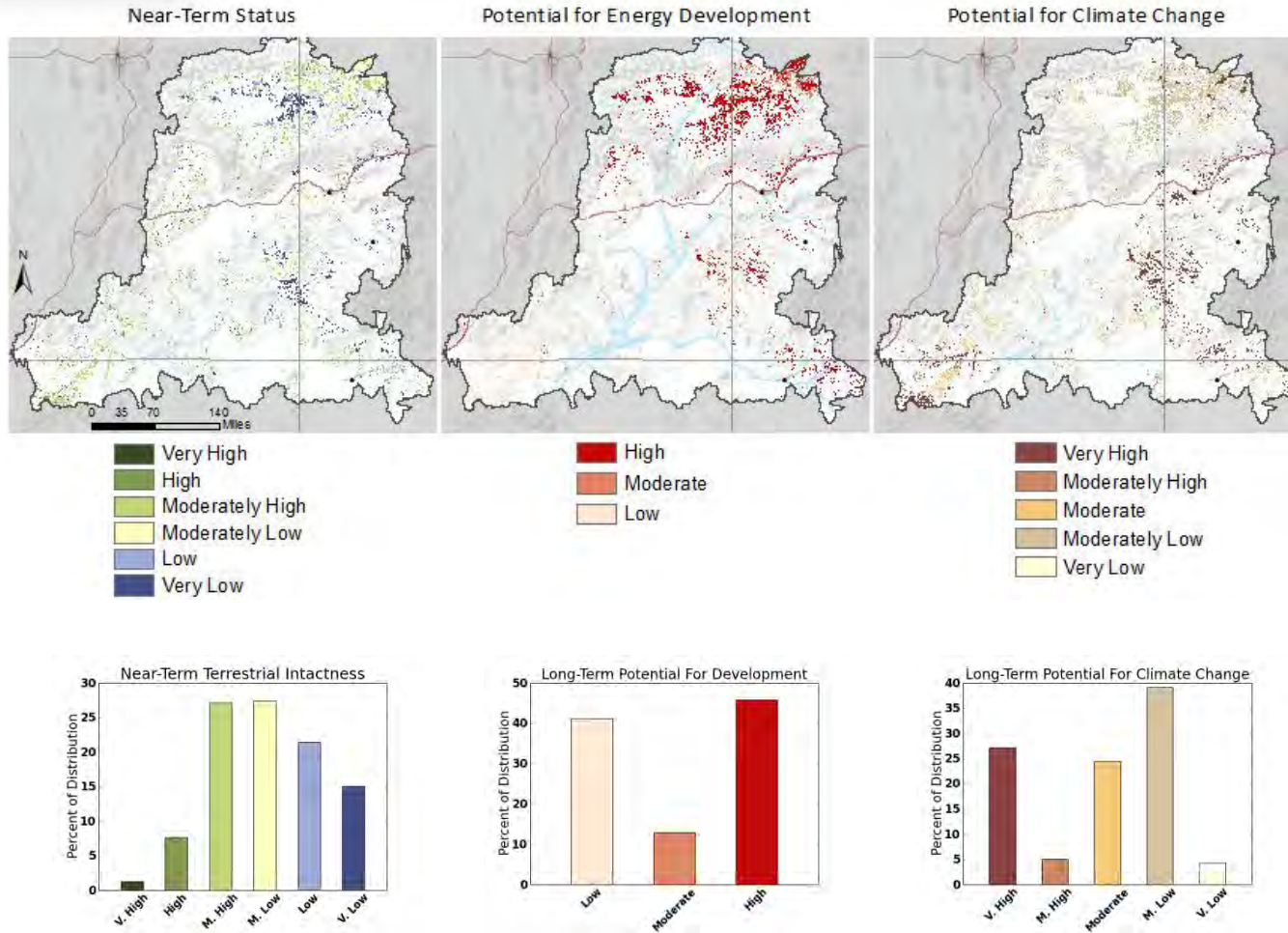
Gunnison Sage Grouse



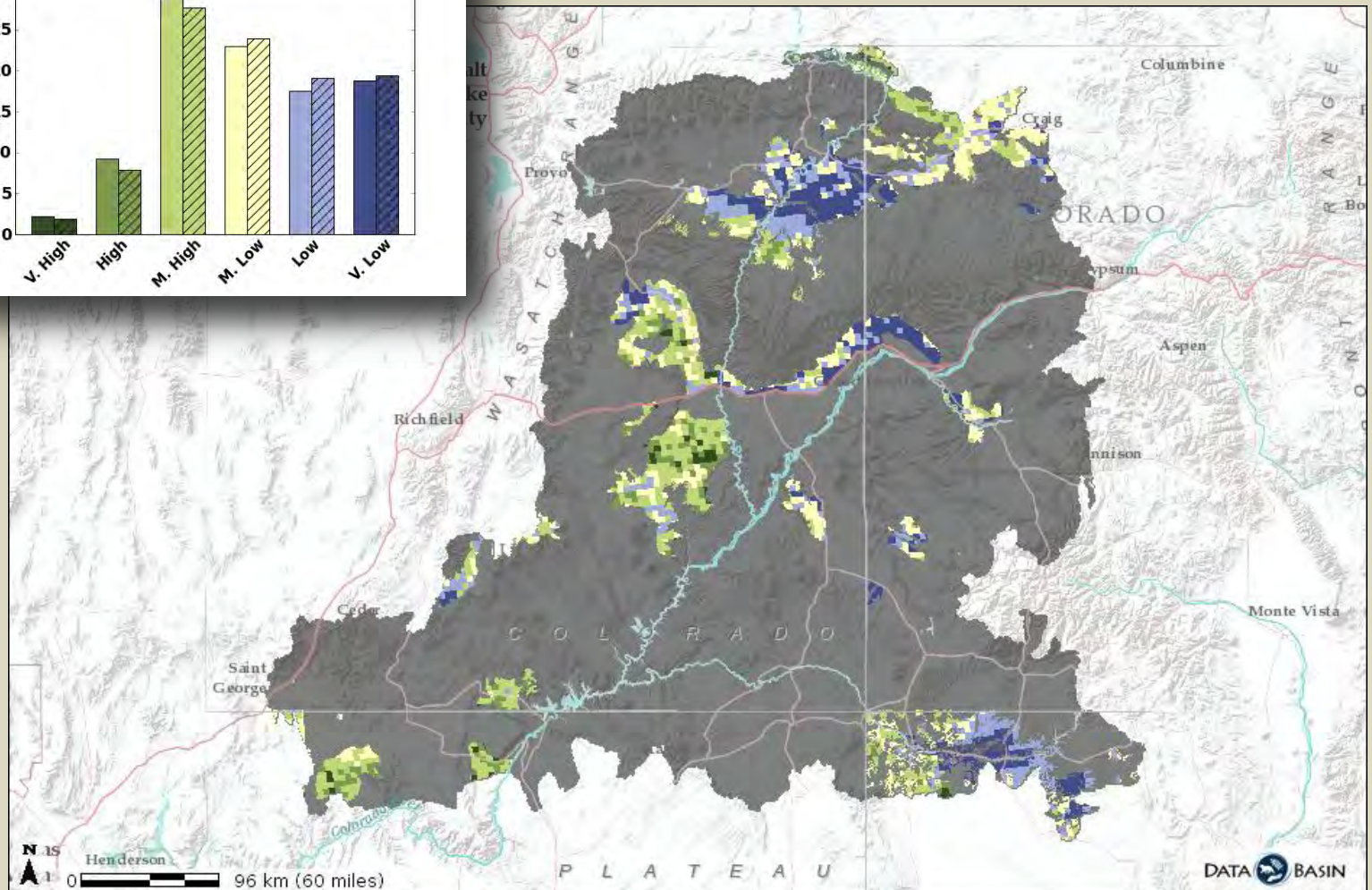
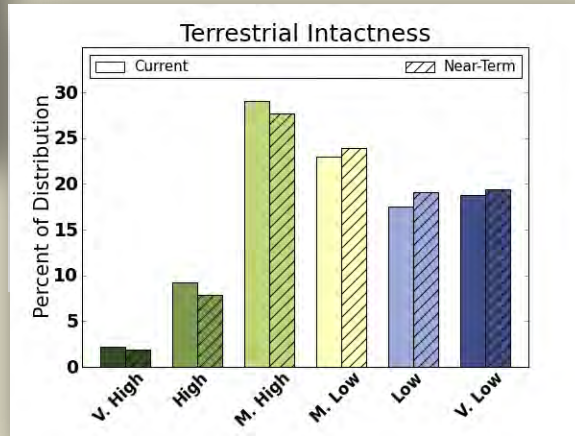


Future Change Agents

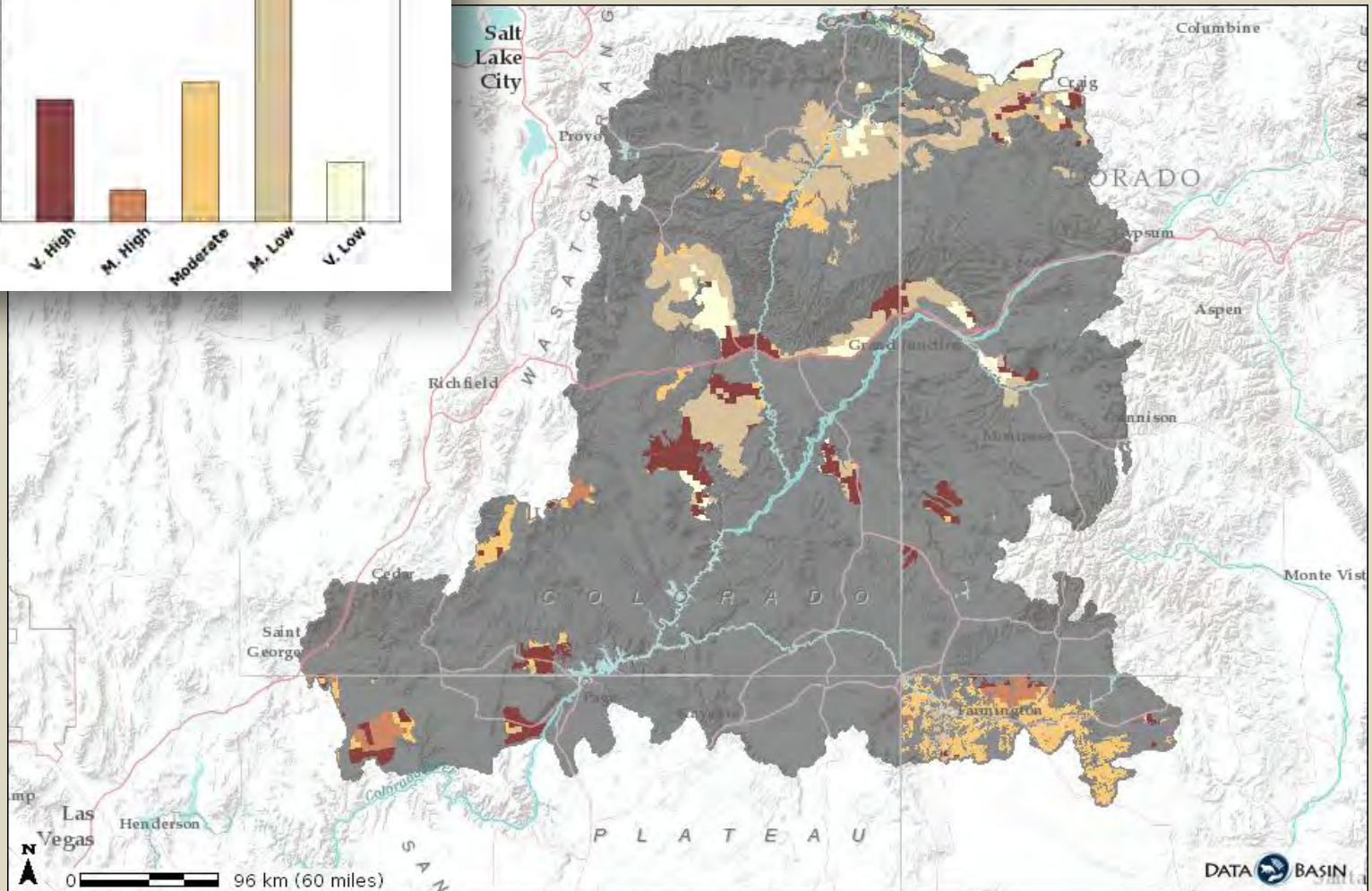
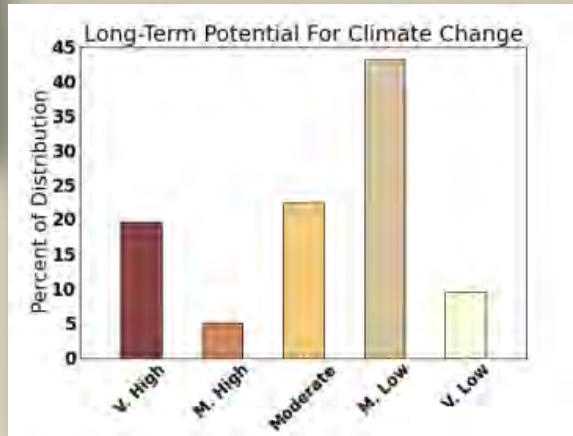
Inter-Mountain Basins Big Sagebrush Shrublands



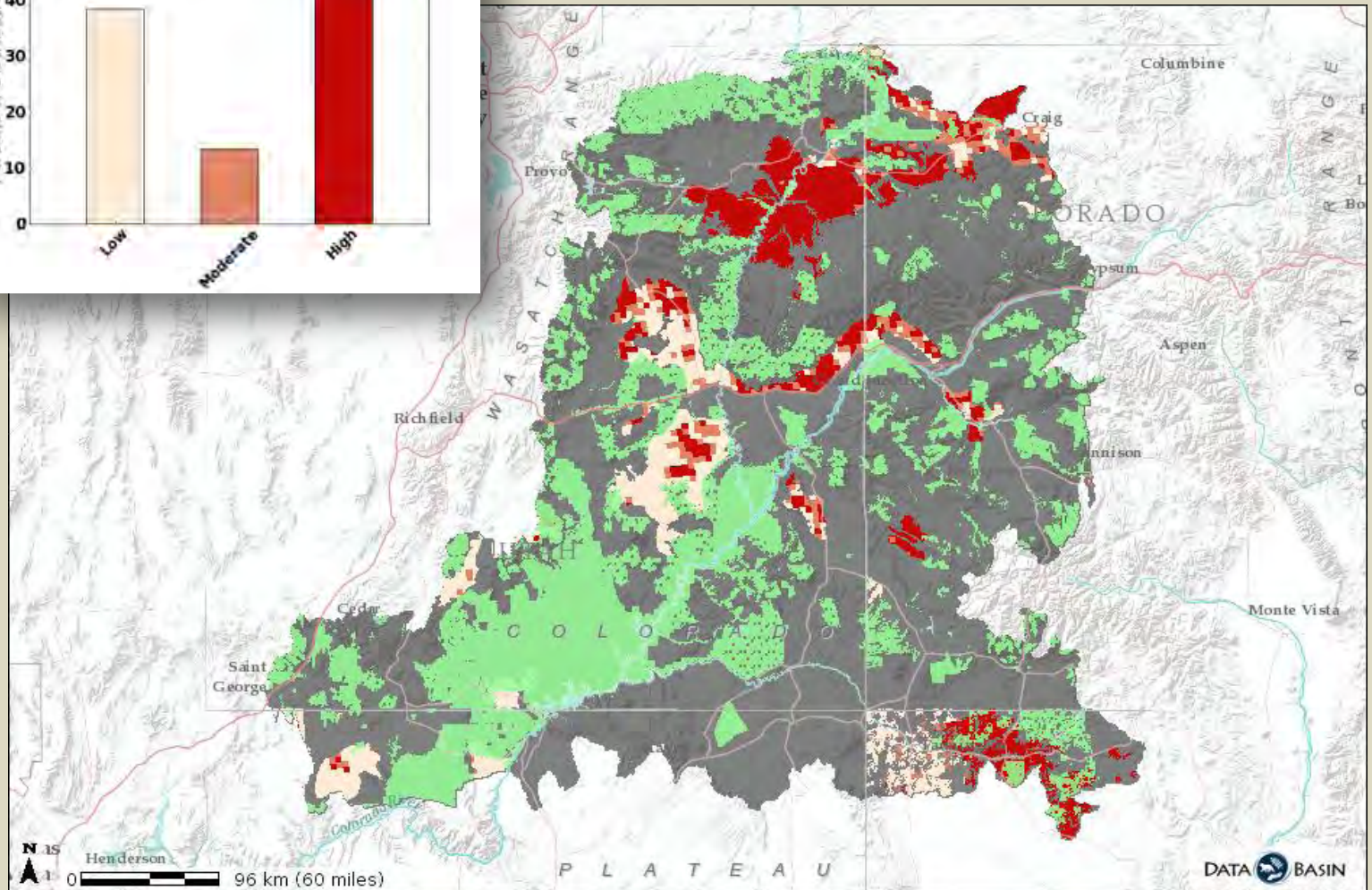
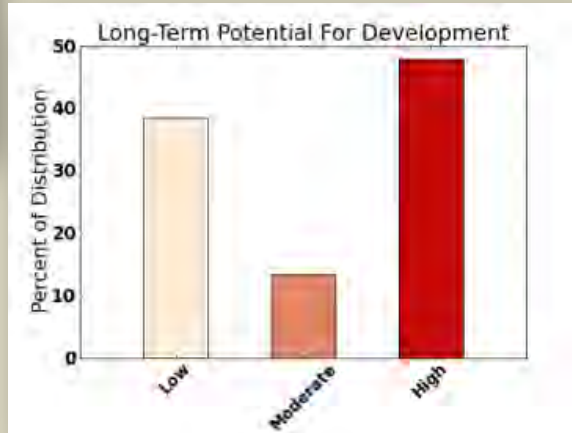
Current and Near-term Status of Pronghorn Antelope



Potential Climate Change Impacts on Pronghorn Antelope



Potential Energy Development Impacts on Pronghorn Antelope



All Results Available in Data Basin

www.databasin.org

The screenshot displays the Data Basin website interface. At the top, the 'DATA BASIN' logo is on the left, and navigation links (HOME, ABOUT, BLOG, HELP, DONATE, LANGUAGE: English, LOG OUT) are on the right. Below the logo, a secondary navigation bar includes 'Explore • Create • Share • Learn' and a search bar. A green header bar contains tabs for 'My Workspace', 'Datasets', 'Maps', 'Galleries', 'People', 'Groups', and 'Admin'. A welcome message 'Welcome James R. Strittholt' is visible on the right side of the header.

The main content area is titled 'Colorado Plateau - Rapid Ecoregional Assessment'. It features a left sidebar with a group menu: 'Group Home', 'Profile', 'Bookmarks', 'Discussions', 'Members (108)', 'Membership Requests (10)', and 'Supporting Documents'. Below the menu is a user profile for 'James R. Strittholt' with a profile picture, followed by notification counts: 'New Messages (1)' and 'New Notifications (13)'. At the bottom of the sidebar are links to 'Create a Map', 'Import a Dataset', 'Create a Group', and 'Create a Gallery'.

The main content area has a sub-header 'COLORADO PLATEAU - RAPID ECOREGIONAL ASSESSMENT' with 'Leave Group' and 'Manage Group' buttons. Below this is a large image of a bird (likely a sparrow hawk) with a 'Welcome.' text overlay. The text reads: 'This group has been created to support review of input datasets, models, and results for the BLM Rapid Ecoregional Assessment (REA) for the Colorado Plateau ecoregion.' Below the image are links for 'Upload Home Image' and 'Delete Home Image'.

The footer contains navigation links (HOME, ABOUT, BLOG, HELP, TERMS OF USE, CONTACT US) and a 'Report a Problem' button.